A NOTE ABOUT THE SAMPLE ACTIVITIES

The following are sample activities designed to show you examples of possible activities for each API. You are not required to use these specific activities in your portfolios. The APIs used in this document come from the column for grades 9-12 of the TCAP-Alt Performance Indicators document, which is available on the Tennessee State Department of Education website. The URL is: http://www.tennessee.gov/education/speced/assessment.shtml#tcap. Scroll down to the "Alternate Assessment" section.

Activities should be written in the past tense (e.g., "[Student's name] completed . . ."), since the evidence sheet should be filled out after the activity has been completed. Be sure to use the student's name when describing what he or she did during the activity (e.g., not, "The student poured hydrogen peroxide over a raw potato," but "Anaxamander poured hydrogen peroxide over a raw potato.").

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *[student's name] will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.1 *Responds to living organisms (e.g., animals, plants, people)*

Sample Activities:

- The teacher placed a live rabbit on [student's name]'s lap, helped [student's name] touch the rabbit's fur and whiskers, and held the rabbit to [student's name]'s face. [Student's name] responded to the rabbit by attempting to stroke it, tracking it with his/her eyes, and making facial expressions in response to the animal's movements and behaviors.
- As [student's name] entered science class, he/she was greeted by name by a peer. In response, [student's name] touch-activated the his "Big Mac" switch, which said, "Hi. What's up?" Two other peers greeted [student's name] by name, and each time, [student's name] responded by activating the switch.
- The teacher placed a bouquet of six roses in a variety of colors (and with the thorns removed) on [student's name] wheelchair tray. [Student's name] reached for and touched the petals, leaves, and stem, with help from the teacher as needed. The teacher stroked [student's name]'s cheek with each flower, and then helped him/her smell the blossom. The teacher verbally described each rose by color as it was presented. [Student's name] responded with vocalizations and facial expressions.

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *[student's name] will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.2 *Identify plants and animals*

Sample Activities:

- With the teacher's help, [student's name] looked through a *National Geographic* magazine. The teacher pointed to pictured objects, plants, or animals and asked, "Is this an animal?" [Student's name] nodded yes or shook his/her head no.
- Given two pictures, one of a plant and one of an animal, [student's name] responded to the question, "Which is the animal?" by pointing to the picture of the animal. When asked, "Which is the plant?" [student's name] pointed to the picture of the plant. This sequence was repeated for a series of five pairs of photographs.
- Given magazines, scissors, glue, and two poster boards (one labeled "plants" and one labeled "animals"), [student's name] cut out pictures of plants and animals from the magazines and glued each one to the correct poster board.
- Given pictures of five familiar animals—horse, dog, cat, bird, and snake—[student's name] verbally identified each.
- On a field trip to the zoo, [student's name] verbally named familiar animals when asked, "What is that?" by a peer partner. The peer praised [student's name] when he/she answered correctly and told him/her the correct name when he/she was wrong.
- On a field trip to a greenhouse, [student's name] correctly identified familiar plants by pointing to each upon request (e.g., Where is the rose? Where is the fern? Where is the sunflower?).

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *[student's name] will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.3 *Indicate appropriate uses of a magnifier*

Sample Activities:

- A magnifying glass was placed in front of [student's name], and he/she reached for it when encouraged to do so by the teacher.
- A magnifying glass was placed in front of [student's name], and he/she grasped the handle when encouraged to do so by a peer.
- Given a magnifying glass and a collection of five small objects—marble, thimble, penny, piece of dandelion fluff, and seashell—[student's name] looked through the magnifying glass to see the objects in greater detail. When asked what he/she saw, [student's name] verbally described each magnified object as he/she looked at it.

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *[student's name] will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.4 *Identify animal body parts such as legs, arms, foot, hand, head, eyes, ears, nose, mouth, and teeth*

Sample Activities:

- [Student's name] was asked to identify his/her body parts by touching each body part as the teacher named it.
- [Student's name] was asked to identify his/her body parts by verbally naming each body part as the teacher pointed to it.
- [Student's name] glued foam body parts to their appropriate positions on a human silhouette made of poster board. Student was prompted as needed by his/her teacher, who provided a full-length mirror and asked guiding questions (e.g., What else is on the face?). [Student's name], upon request, showed where his/her own body parts are located in comparison to the silhouette's.

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *The student will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.5 *Identify plant parts such as roots, stem, leaf, fruit, petal*

Sample Activities:

- Given a live plant, [student's name] identified the root, leaf, and stem by pointing to each one as it was named by the teacher.
- Given a diagram of a plant, [student's name] receptively identified the plant parts by pointing to the correct part on the diagram when requested by the teacher.
- Given a diagram of a plant, [student's name] expressively identified the plant parts by naming the correct part on the diagram when the teacher pointed to it.
- Given a worksheet about the parts of a plant, [student's name] completed the worksheet by drawing a line from the correct plant part to its name.
- Given a plant from the classroom garden, [student's name] verbally identified the following plant parts when the teacher pointed to them: roots, stems, leaf, fruit, and petal.
- Given a worksheet with a picture of a plant on it, [student's name] used a pencil to correctly label each plant part: root, stem, leaf, fruit, and petal.
- Given an artificial plant with all the visible parts of a real plant (root, leaf, stem, flower), [student's name] interacted with a peer by pointing to and touching each part as it was named by the peer. Next, the peer drew the plant on a sheet of paper. [Student's name] copied it and labeled the parts, with assistance as needed.
- Given art paper and a choice of colored pencils or markers, [student's name] drew a representation of a plant of choice and labeled its parts.
- Given a collection of various art supplies (e.g., foam, yarn, poster board, colored pencils, scissors, pipe cleaners, glue, construction paper), [student's name] created a model of a plant and labeled the following plant parts: root, leaf, stem, petal.

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *The student will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.6 *Identify the part that is missing from a specific plant or animal*

Sample Activities:

- [Student's name] was given a felt fish with removable parts—eyes, mouth, fin, and tail. One body part was missing. [Student's name] was asked which part was missing, and he/she verbally identified the correct part. This process was repeated until the fish had been presented with each part missing at least twice.
- Given a set of magazine photos of animals, each altered so that the animal represented was missing a body part, [student's name] verbally identified the missing part in response to the question, "What's missing?"
- Given a series of 10 photographs, each of a plant with a missing part, [student's name] correctly stated which part—roots, stem, or leaf—was missing.

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *The student will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.7 *Identify a single-celled organism and an organism with 2 or more cells*

Sample Activities:

- With help from a peer, when presented with a microscope, [student's name] looked through the eyepiece. (Prerequisite)
- [Student's name] watched a video about single-celled and multi-celled organisms.
- [Student's name] identified a single-celled organism and an organism with two or more cells by looking through a microscope at an example of each one, drawing a picture of what he/she saw, and labeling each picture.
- When presented with a book of photographs of single-celled and multi-celled organisms, [student's name] identified each on request by pointing to a picture of a cell or a picture of several connected cells.

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *The student will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.8 *Identify organs and their functions*

Sample Activities:

- [Student's name] colored a picture of a human silhouette with the various internal organs correctly placed.
- Given a plastic "Visible Man" model showing the placement of the organs (heart, lungs, brain, eyes, large intestine, small intestine, kidneys, liver), [student's name] pointed to each organ as the teacher named it.
- Given a diagram of the human body showing organs, [student's name] used his/her communication device to identify each organ (heart, lungs, brain, eyes, large intestine, small intestine, kidneys, liver) as the teacher pointed to it.
- Given a human shape cut from felt and five felt pieces representing major organs—heart, lungs, liver, brain, and intestines—[student's name] correctly placed the felt organs on the felt human.
- When verbally asked questions (e.g., Where is your heart? Where is your eye? Where is your brain?), [student's name] correctly pointed to the part of the body where that organ is located.
- [Student's name] verbally answered questions about the function of organs, (e.g., What does your heart do? What does your liver do? What do we do with our eyes? Our lungs? Our brains?).
- [Student's name] watched a video about the human heart.
- [Student's name] completed a worksheet by drawing a line from the name of an organ (heart, lungs, brain, eyes, intestines, kidneys, liver) to its function.
- [Student's name] and a peer explored and discussed the book/interactive kit: *Smartlab: The Human Body*, composed of a 12-inch plastic human body model; nine removable vital organs made of squishy foam; skeletal, vascular and muscular systems made of plastic; forceps and tweezers; tray to organize the organs; and a 32-page fully illustrated book.

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *The student will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.9 *Recognize that living organisms are mostly made up of water*

Sample Activities:

- After playing kickball in the gym, [student's name] participated in a class discussion about sweat, dehydration, and how drinking water makes us feel better because our bodies are mostly made up of water. They discussed how drinking water is like "filling up the bucket" again after losing water by sweating. The class then discussed whether any of them had ever gotten a cut or a scrape. The discussion about the liquid properties of blood was used to further show that our bodies are made up largely of water.
- [Student's name] watched a video about how the human body works, including the fact that the body is largely made up of water. Afterward, he/she helped fill up a large container with enough water to equal the amount found in the body of a person approximately the size of students in the class.

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *The student will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.10 *Identify a frog's and a butterfly's life cycles*

Sample Activities:

- Given a small net and a plastic bucket half-filled with pond water, [student's name] helped catch tadpoles for a class observation of the life cycle of a frog.
- [Student's name] used poster board, scissors, glue, markers, colored pencils, and pictures cut from old magazines to make a poster of the life cycle of a frog.
- [Student's name] made a yarn-bound, illustrated, 8-page booklet about the life cycle of a frog.
- [Student's name] watched as a butterfly emerged from a chrysalis, participated in a group discussion about what happened and how the caterpillar changed, then drew a picture on art paper of the life stages of the butterfly.
- [Student's name] colored a worksheet about the life cycle of a butterfly.

Content Standard: LIFE SCIENCE (Cell Structure and Function)

Standard: *The student will investigate the structure and function of plant and animal cells.*

Alternate Learning Expectation (ALE): LS.1A *Recognize that living things are made up of smaller parts that contribute to the operation and well-being of entire organisms*

Alternate Performance Indicator (API): LS.1A.11 *Recognize that there are different biomolecules in food. (e.g., French fries—fat, candy—sugar, potatoes—starch)*

Sample Activities:

- Given a tray with a peach slice, an M&M, a sugar cube, a potato chip, and a salted nut, [student's name] tasted each and identified the ones that tasted sweet. With the teacher asking guiding questions as needed, [student's name] discussed what gives the sweet items their sweet taste (i.e., the sugar they contain).
- Given 20 pictures of foods and a folder with two pockets, one labeled "starch" and one labeled "sugar," [student's name] placed each picture in the appropriate pocket.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

Standard: *The student will investigate how living things interact with one another and with non-living elements of their environment.*

Alternate Learning Expectation (ALE): LS.2A. *Recognize the distinction between living and non-living things*
LS.2B. *Realize that organisms use their senses to interact with their environment*
LS.2C. *Examine interrelationships among plants, animals, and their environment*
LS.2D. *Recognize that the environment and the organisms that live in it can be affected by pollution*
LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.1 *Responds to sensory input*

Sample Activities:

- LS.2A.1: The teacher placed a model train on [student's name]'s lap and helped [student's name] explore the way the train looked and felt. [Student's name] responded through facial expressions and by touching the train. The teacher and peers discussed how they could tell that the train is not a living thing. Next, the teacher placed a live kitten on [student's name]'s lap and helped [student's name] explore the way the kitten looked and felt. [Student's name] responded through facial expressions and vocalizations and by touching the kitten. The teacher and peers discussed how they could tell that the kitten is a living thing.
- LS.2A.1: The teacher gently stroked [student's name]'s hands and arms with a variety of textured objects (e.g., a silk scarf, a scrap of velvet, a square of slick vinyl, a piece of nubby wool) and talked about the differences in how each one felt.
- LS.2A.1: The teacher helped [student's name] smell, taste, and touch a variety of fruits and vegetables cut into small bites. As [student's name] explored each, the teacher named each one and discussed how it looked, tasted, smelled, and felt.
- LS.2B.1: [Student's name] looked at, smelled, touched, and tasted a real apple and then looked at, smelled, and touched a plastic apple. Then [student's name] smelled a real mint leaf and a plastic mint leaf. The teacher explained the differences between them as [student's name] explored them. (Prerequisite)
- LS.2C.1: [Student's name] watched and discussed the actions of a pair of anole lizards in their terrarium, which incorporated live plants.
- LS.2D.1: [Student's name] went on a nature walk with the teacher and a small group of peers. The teacher and peers pointed out litter and other evidence of pollution, and [student's name] responded by looking in the designated direction.
- LS.2E.1: [Student's name] watched and discussed the actions of the classroom gerbils playing with the toys in their Habitrail.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

Standard: *The student will investigate how living things interact with one another and with non-living elements of their environment.*

Alternate Learning Expectation (ALE): LS.2A. *Recognize the distinction between living and non-living things*
LS.2B. *Realize that organisms use their senses to interact with their environment*
LS.2C. *Examine interrelationships among plants, animals, and their environment*
LS.2D. *Recognize that the environment and the organisms that live in it can be affected by pollution*
LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.2 *Attend to and interact with surroundings*

Sample Activities:

- LS.2A.2: A peer took [student's name] on a walk around the school, pointing to various living things (e.g., plant, class pet, teacher, student) and non-living things (e.g., desk, pencil, door, water fountain) and asking, "Is this alive?" [Student's name] answered either verbally or by nodding his/her head yes or shaking his/her head no.
- LS.2B.2: On a class trip to a petting zoo with farm animals, [student's name] used his/her senses to interact with the animals in a constructive manner and explore a farm environment. He/she fed the goats and felt their warm, wet tongues on his fingers; stroked the horse's mane and body; rode the horse; ground dried corn in a hand mill and smelled its aroma; and rode an open train and listened to the train whistle. [Student's name] answered simple questions during the trip about what he/she was experiencing with his/her senses.
- LS.2B.2: Given four foods—pineapple, apple, orange, and coconut—[student's name], with the teacher's help, explored each food by looking at, touching, and smelling it. Then the teacher cut each food open and [student's name] explored the texture, smell, and taste of each food.
- LS.2C.2: With hand-over-hand assistance as needed, [student's name] helped assemble a terrarium (including live plants) to be used as a habitat for a pair of anole lizards.
- LS.2D.2: During a "community clean-up" project, a peer helped [student's name] identify pieces of trash to pick up and encouraged [student's name] to pick them up. [Student's name] picked up each piece of trash and put it in a garbage sack carried by the peer.
- LS.2E.2: On a field trip to the zoo, [student's name] watched the animals interact with each and their environment. [Student's name] and his/her assigned "buddy" discussed each animal's behavior in relation to the other animals and its environment.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

Standard: *The student will investigate how living things interact with one another and with non-living elements of their environment.*

Alternate Learning Expectation (ALE): LS.2A. *Recognize the distinction between living and non-living things*
LS.2B. *Realize that organisms use their senses to interact with their environment*
LS.2C. *Examine interrelationships among plants, animals, and their environment*
LS.2D. *Recognize that the environment and the organisms that live in it can be affected by pollution*
LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.3 *Recognize that there are five senses*

Sample Activities:

- LS.2A.3: [student's name] and a small group of peers were given pictures of five living things and five non-living things. They discussed whether the subject of the picture could see, smell, taste, and touch; whether it was alive or not; and how they knew. Then they sorted the pictures correctly into the categories "living" and "non-living."
- LS.2B.3: The students watched a video on volcanoes. After the video, each student was instructed to make a fist and hold up his/her arm. The teacher pressed on each student's hand to demonstrate pressure. Then students answered a series of questions about what it would be like to experience a volcanic eruption (e.g., Can you hear a volcano erupt? What would it sound like? What would you see? What might you feel? What would the air smell like? If you took a breath with your mouth, what would you taste?). After answering these questions, each student drew a picture on art paper of a volcano erupting.
- LS.2B.3: [Student's name] participated in a class activity in which the teacher asked questions about which body part is used for a given sense (e.g., What do you smell with? What do you taste with?), and [student's name] and class pointed to his/her appropriate body part.
- LS.2C.3: [Student's name] watched a video about rabbits, then discussed with a small group of peers how the rabbits used their five senses to survive in the wild.
- LS.2D.3: [Student's name] accompanied the class on a trip to a landfill. They discussed how the air around the landfill smells, how the area looked, and how the local people and wildlife might be affected by living near the landfill.
- LS.2E.3: [Student's name] played with the classroom guinea pig, and then discussed how the guinea pig used its senses to interact with [student's name] and with the nonliving objects in its cage.
- [Student's name] explored the following items using all five senses: tasted–lemon, cookie; touched–cotton, driftwood; smelled–perfume, coffee beans; listened–music, rain stick; looked–photograph, mobile.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

Standard: *The student will investigate how living things interact with one another and with non-living elements of their environment.*

Alternate Learning Expectation (ALE): LS.2A. *Recognize the distinction between living and non-living things*
LS.2B. *Realize that organisms use their senses to interact with their environment*
LS.2C. *Examine interrelationships among plants, animals, and their environment*
LS.2D. *Recognize that the environment and the organisms that live in it can be affected by pollution*
LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.4 *Demonstrate use of the senses to explore the environment*

Sample Activities:

- LS.2A.4: [Student's name] went on a nature walk with peers. They used disposable cameras to take pictures of living things. The pictures were then put in a scrapbook about living things.
- LS.2B.4: After being blindfolded, [student's name] and peers explored the look, feel, and taste of Jell-o, pudding, cooked spaghetti, raw spaghetti, grapes, Triscuits, cashews, raw broccoli, raw jicama strips, and lemon slices. The group discussed each item after everyone had a chance to try it.
- LS.2B.4: [Student's name] listened to a lecture about how animals use their senses for survival. Then each student was provided with ear plugs, a blindfold, and gloves and asked to perform various tasks (e.g., finding a wedge of grapefruit while blindfolded and using the sense of smell; explaining the taste of a piece of candy; identifying a series of sounds with and without earplugs). [Student's name] completed each task and participated in a discussion of how each sense might help an animal or person to explore their environment and survive in it.
- LS.2B.4: Given pictures of objects, along with a word used to describe each object (e.g., colorful balloons, ringing alarm clock), [student's name] explained which sense he/she would use to describe each object.
- LS.2C.4: [Student's name] accompanied the class on a field trip to the Botanical Gardens. Afterward, he/she used tempera paints to paint a picture of the plants and animals (e.g., butterflies, insects, Koi fish, birds) seen there.
- LS.2D.4: [Student's name] accompanied the class to the stingray petting tank, where he/she fed and petted the stingrays. He/she described how the stingray looked and felt and how the tank smelled.
- LS.2E.4: [Student's name] accompanied the class on a field trip to the lorikeet aviary at the zoo. He/she fed the birds nectar and described how the birds looked and sounded and how it felt when the birds landed on him/her to drink the nectar.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

Standard: *The student will investigate how living things interact with one another and with non-living elements of their environment.*

Alternate Learning Expectation (ALE): LS.2A. *Recognize the distinction between living and non-living things*
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LS.2C. *Examine interrelationships among plants, animals, and their environment*
LS.2D. *Recognize that the environment and the organisms that live in it can be affected by pollution*
LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.5 *Demonstrate knowledge of cause and effect by expecting specific results*

Sample Activities:

- LS.2A.5: Given a baby chick and a metal spoon, [student's name] responded correctly to a question about which was alive and which was not. Then, when asked what would happen if [student's name] touched the chick and the spoon, [student's name] made a reasonable prediction about the behavior of each. [Student's name] then tested his/her prediction by touching both. Next, [student's name] predicted what would happen if he/she placed a kernel of corn in front of the chick and the spoon. He/she tested that prediction as well.
- LS.2B.5: [Student's name] predicted how a pet rat used its senses to explore each of the following four new objects placed one at a time into its cage: cardboard tube, apple slice, run-on wheel, and seed-and-honey treat stick. Each object was placed in the cage after [student's name]'s prediction to see if the prediction was correct.
- LS.2C.5: [Student's name] predicted what anoles' behavior would be if a new plant were added to their terrarium. Then the plant was put in the habitat to see if [student's name]'s prediction was correct.
- LS.2D.5: [Student's name] watched a video about how pollution may cause genetic defects in frogs. The video was paused at intervals, and [student's name] was asked to predict what would happen next.
- LS.2E.5: With the teacher's assistance as needed, [student's name] read a pop-up book for adults about animals and their environments. [Student's name] made predictions about what would happen when each flap was pulled or opened.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

Standard: *The student will investigate how living things interact with one another and with non-living elements of their environment.*

Alternate Learning Expectation (ALE): LS.2A. *Recognize the distinction between living and non-living things*
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LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.6 *Recognize how plants and animals interact with each other in their environment*

Sample Activities:

- LS.2A.6: The teacher showed the class three live plants—a spider plant, a miniature rose bush, and a cactus—and one dead plant. [Student's name] participated in a class discussion about how we can know if a plant is alive or dead.
- LS.2B.6: [Student's name] watched a short video about rabbits. Then he/she and a small group of peers discussed how the rabbit used its senses to find food, find shelter, and detect danger.
- LS.2C.6: [Student's name] listened to a park ranger speak about how environmental issues that affect plants also affect animals, and vice versa.
- LS.2C.6: [Student's name] watched a video about the plants and animals of the rain forest and how they interact.
- LS.2C.6: [Student's name] helped a group of peers make a map of an African savannah and place plastic animals on it in numbers that would proportionally represent their numbers in real life. The group added or subtracted animals in response to scenarios proposed by the teacher (e.g., a drought kills the plants and dries up the water; poachers kill most of the apex predators; developers take half of the land for houses and businesses; a brush fire destroys many of the plants and animals; the number of prey animals decreases dramatically due to illness or overhunting). These scenarios demonstrated the connections between the animals and their environment.
- LS.2D.6: [Student's name] used photos, markers, and glue to make a poster about the effects of water pollution on plants and animals.
- LS.2E.6: After reading a book about the ways in which butterflies and flowers benefit from each other, [student's name] helped plant a butterfly garden outside the classroom.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

Standard: *The student will investigate how living things interact with one another and with non-living elements of their environment.*

Alternate Learning Expectation (ALE): LS.2A. *Recognize the distinction between living and non-living things*
LS.2B. *Realize that organisms use their senses to interact with their environment*
LS.2C. *Examine interrelationships among plants, animals, and their environment*
LS.2D. *Recognize that the environment and the organisms that live in it can be affected by pollution*
LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.7 *Identify examples of pollutants found in the environment (e.g., garbage, mold)*

Sample Activities:

- LS.2A.7: On a poster, the teacher put pictures of living things (e.g., turtle, salamander, fish, frog, deer) and non-living things (e.g., rock, dead branch) found in or near a pond. Then pictures of various environmental pollutants (e.g., garbage, mold, Clorox) were shown to the class. [Student's name] participated in a class discussion about which of the animals or objects would be affected by each pollutant, and in what way.
- LS.2B.7: Given poster board and a choice of markers or colored pencils, [student's name] made a poster about different types of pollutants (e.g., garbage, car exhaust, smoke) and which of the five senses might be involved in identifying them.
- LS.2C.7: During a small-group activity, [student's name] helped compile a list of various environmental pollutants (e.g., garbage, car exhaust, smoke) and discussed how each affects the plants and animals in the environment.
- LS.2D.7: [Student's name] watched a video about volunteers who helped care for animals affected by the Exxon Valdez oil spill.
- LS.2E.7: Each student was given a nametag identifying him/her either as something in the environment (e.g., grass, water, insect, songbird, fish, osprey, deer, wolf) or a type of pollutant (e.g., air pollution, pesticide, litter, water pollution). Each student with an environmental label was connected to the appropriate others by a length of yarn (e.g., the deer was connected to the wolf, the grass, and the water; the wolf was connected to the deer and the water; the fish was connected to the water and the osprey). When the "pollutants" were brought in, the things they would directly affect were removed from the web. The plants/animals/elements attached to those things were then also removed. After the entire web had collapsed, the class discussed how the things in the environment were related and what happens when one of those things is damaged or removed.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

Standard: *The student will investigate how living things interact with one another and with non-living elements of their environment.*

Alternate Learning Expectation (ALE): LS.2A. *Recognize the distinction between living and non-living things*
LS.2B. *Realize that organisms use their senses to interact with their environment*
LS.2C. *Examine interrelationships among plants, animals, and their environment*
LS.2D. *Recognize that the environment and the organisms that live in it can be affected by pollution*
LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.8 *Identify the sense used to collect specific information (e.g., ears – hear)*

Sample Activities:

- LS.2A.8: A peer took [student's name] around the classroom, pointing to various classroom objects (e.g., pencil sharpener, bookshelf) and living things (e.g., classmates, class pets) and asking, "Does [this person or thing] have senses?" [Student's name] answered correctly. Then [student's name] and peer discussed the differences between objects, which have no senses, and living things, which do have senses.
- LS.2B.8: [Student's name] and a small group of peers were given containers of the following items: Jell-o, grapes, cooked spaghetti, uncooked noodles, Cool Whip, and marbles. [Student's name] and peers opened the containers and tested the items using their senses. They wrote down which senses were most useful in testing a given material and why. [Student's name] gave his/her answers verbally, and a peer wrote them down on paper.
- LS.2C.8: [Student's name] watched the film *The Bear*. The teacher stopped the film at various points to ask what sense the bear was using, how the viewer might tell which sense was being used, and what information the bear might be getting through that sense.
- LS.2D.8: [Student's name] watched a video about how pollution can affect the senses of various organisms.
- LS.2E.8: [Student's name] and a peer played a game called "Two Chairs." To play, students sat across from each other. One made a visual observation about the other (e.g., "I see a pair of red glasses on your face."). Then the other student made an observation (e.g., "I see you have brown, curly hair."). They continued alternating observations until each was described thoroughly. Then the group discussed how much we can learn about each other with our eyes. The teacher then led a discussion about what we can learn about each other using our ears and our noses (e.g., Does the person have a loud or soft voice? What might that tell us about him/her? Does the person wear perfume or cologne? How much? What kind? What might that tell us about that person?)

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

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Alternate Learning Expecta
tion (ALE): LS.2A. *Recognize the distinction between living and non-living things*
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LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.9 *Categorize objects as living and non-living*

Sample Activities:

- LS.2A.9: Given magazines, scissors, glue, and two pieces of poster board (one labeled "living" and one labeled "non-living"), [student's name] cut pictures of living and non-living things from the magazines. He/she pasted each picture on the correct poster.
- LS.2B.9: Given pictures of 10 living things (including some, such as bats and earthworms, that perceive the world differently from humans) and 10 things that are not alive, [student's name] classified each as to whether it is alive or not, and whether it has senses. The teacher used guiding questions to help [student's name] realize that living things all have some way of sensing their environment (even though they may not have all of the *same* senses).
- LS.2C.9: Given 10 pictures of living things and 10 pictures of non-living things from a desert environment, [student's name] identified each as living or non-living and discussed the relationship each one has with the others. The teacher then used guiding questions to help [student's name] understand the differences in the relationships between living and non-living things
- LS.2D.9: Given five pictures of living things and five pictures of non-living things, [student's name] participated in a discussion of how pollution affects each and how it affects living things differently from non-living things.
- LS.2E.9: On a field trip to a farm, [student's name] and peers pointed out living things (e.g., dog, chickens, cows, horses, pigs, sheep) and non-living things (e.g., lead rope, tractor, feed trough, salt block). They observed and discussed how—and whether—the living and non-living things interact with each other and their environment.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

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Alternate Learning Expectation (ALE): LS.2A. *Recognize the distinction between living and non-living things*
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LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.10 *Select the plants and animals found in a specific environment*

Sample Activities:

- LS.2A.10: [Student's name] made a shoebox diorama of a jungle scene, complete with plastic models of plants, animals, and inanimate objects. As each item was placed in the scene, [student's name] told whether it represented a living or nonliving thing.
- LS.2B.10: With help from a peer tutor, [student's name] made a 10-page book, bound with yarn and illustrated with pictures cut from wildlife magazines, about how woodland animals use their senses to explore the plants and objects around them.
- LS.2C.10: Given stickers of plants and animals from various habitats and a teacher-made "Colorform"-type desert landscape—a laminated picture of a desert with no plants or animals—[student's name] placed stickers of desert plants and animals in appropriate positions on the landscape.
- LS.2D.10: [Student's name] discussed the differences between the plants and animals in two pictures, one taken of the area surrounding an unpolluted pond and the other taken of the same area after it was tainted by industrial pollution.
- LS.2E.10: From a collection of wildlife magazines, [student's name] chose pictures of marshland animals and made a poster of the plants, animals, and inanimate objects that inhabit a marshland. [Student's name] used a red marker to connect subjects that interact with each other (e.g., a frog and an insect, a heron and a fish).

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

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Alternate Learning Expectation (ALE): LS.2A. *Recognize the distinction between living and non-living things*
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LS.2D*. Recognize that the environment and the organisms that live in it can be affected by pollution*
LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.11 *Identify ways that organisms affect their environment*

Sample Activities:

- LS.2A.11: Given pictures of 10 living things, [student's name] verbally identified each as being alive and discussed how each affects its environment.
- LS.2B.11: [Student's name] watched a video about earthworms and discussed how worms affect their environment and how worms might perceive the world (e.g., Do worms have senses? How are a worm's senses different from ours? What would it be like to be a worm? If you were a worm, what sense would you use most?)
- LS.2C.11: [Student's name] watched the inhabitants of a saltwater coral reef aquarium and discussed with the teacher how each plant, animal, or object contributes to and benefits from the ecology of the reef.
- LS.2D.11: Using markers and a whiteboard, [student's name] made a list of ways the environment is affected by pollution and how adaptations (or inability to adapt) by the plants and animals can in turn affect the environment.
- LS.2E.11: [Student's name] watched a video about how beavers make dams and how the dams affect the environment. Then [student's name] and a small group of peers made a model in a sand-filled tub demonstrating how a dam can change the landscape. They made a "river" by making a trench and pouring water into it, then added a dam made from toothpicks and modeling clay and showed how the dam would affect the flow of the water and change the terrain.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

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LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.12 *Identify ways that human actions or natural disasters affect the environment*

Sample Activities:

- LS.2A.12: [Student's name] watched a video about California wildfires, and then took part in a discussion about what might cause these fires and how the fires affect living and nonliving things. The discussion encompassed both positive and negative effects of forest fires.
- LS.2B.12: After listening to a story about volcanoes, [student's name] helped a group of peers make a model of a volcano that would erupt with a solution of vinegar, food coloring, and baking soda. After a demonstration of the eruption, [student's name] participated in a discussion about what animals and people in the area of an eruption might see, hear, feel, and smell as they become aware of the eruption, as they escape it, and after their return when it is over.
- LS.2C.12: [Student's name] watched a movie about a community affected by flooding, and then took part in a discussion about how the flood affected the plants and animals in the area and their relationships to each other.
- LS.2D.12: [Student's name] used glue, poster board, markers, colored pencils, and pictures cut from magazines to make a poster of how pollution affects the environment and its inhabitants.
- LS.2D.12: [Student's name] accompanied the class to a stingray petting tank, where he/she fed and petted the stingrays. He/she described how the stingray looked and felt and how the tank smelled. Then he/she listened to the stingray expert talk about how pollution can affect stingrays in the wild.
- LS.2E.12: [Student's name] watched a documentary about an earthquake and how the people and animals were affected by it.

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Alternate Performance Indicator (API): LS.2A-E.13 *Identify what (e.g., animal, plant or climate) is commonly found in a selected biome (e.g., desert, tundra, tropical)*

Sample Activities:

- LS.2A.13: [Student's name] and a peer looked through a book of rain forest photographs and discussed the climate; named the pictured plants, animals, and objects; and discussed whether the things pictured were living or nonliving.
- LS.2B.13: Given a 16-page bound blank book, markers, scissors, crayons, colored pencils, glue, and old magazines to cut photos from, [student's name] and a peer created a book about how animals of the African savannah use their senses to survive.
- LS.2C.13: [Student's name] played the computer game *Zoo Tycoon*, in which he or she must create exhibits for animals based on their natural habitats. In order for [student's name]'s virtual animals to thrive, [student's name] had to choose plants and terrain suitable for the animal and then practice good husbandry to make sure the created habitat remained in balance.
- LS.2C.13: [Student's name] made a diorama of a woodland biome using plastic animals and model railroad terrain (e.g., moss, trees, ferns, rocks).
- LS.2D.13: [Student's name] accompanied the class on a field trip to a small wildlife sanctuary, where a conservationist showed them animals native to the area and discussed the affects of pollution on the local wildlife. Upon returning to school, [student's name] helped the class generate a list of ways to combat pollution and how doing so could help the wildlife.
- LS.2E.13: Given a choice of colored pencils or crayons, [student's name] drew a picture of the desert which included at least one animal and one plant and which showed the correct weather/climate for that biome.
- LS.2E.13: [Student's name] read a book about the tundra while listening to the accompanying book on tape. Then [student's name] named 3 animals and one plant from the tundra, described the climate and location, and told the difference between the alpine and arctic tundra.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

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LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.14 *Identify a relationship where one organism is hurt and the other benefits (e.g., ticks on dogs, mistletoe on trees)*

Sample Activities:

- LS.2A.14: [Student's name] was given a picture of a tick. Next, [student's name] was shown a series of 10 photographs of animals, plants, and inanimate objects. [Student's name] sorted the 10 photographs into two piles: things the tick can feed on and things the tick cannot feed on. The teacher asked guiding questions to help [student's name] reach the conclusion that ticks feed on animals, but not on plants or inanimate objects.
- LS.2B.14: [Student's name] watched a short film about parasitic insects (e.g., fleas, ticks, mosquitoes), then took part in a discussion about how these insects feed on their hosts, how it feels to the host (e.g., itchy, painful), and which of the host's senses provide the most information about the infestation (touch).
- LS.2C.14: After a lecture and slideshow from a visiting vet about how heartworms can be harmful to pets, [student's name] colored and labeled a worksheet about the life cycle of heartworms.
- LS.2D.14: [Student's name] listened to a presentation by a visiting representative from the Tennessee Department of Environment and Conservation (TSEC), who discussed the effects of water pollution on fish, turtles, water snakes, and amphibians. Among the topics discussed was the fact that when animals are weakened by exposure to pollution, they become more vulnerable to parasites. After the presentation, [student's name] helped make a poster representing the effects of pollution on fish, turtles, water snakes, frogs, and salamanders, and the parasites that feed on them.
- LS.2E.14: [Student's name] completed a 5-item worksheet by drawing a line from a pictured plant or animal to the parasite that typically attacks it: dog/tick, tree/mistletoe, whitefly/wasp, bloodworm/horse, vine/corpse flower.

Content Standard: LIFE SCIENCE (Interactions between living things and their environment)

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LS.2B. *Realize that organisms use their senses to interact with their environment*
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LS.2D. *Recognize that the environment and the organisms that live in it can be affected by pollution*
LS.2E. *Investigate how living things interact with one another and with non-living elements of their environment*

Alternate Performance Indicator (API): LS.2A-E.15 *Determine the effects of human activities on ecosystems (e.g., littering)*

Sample Activities:

- LS.2A.15: [Student's name] watched a brief film clip of people littering, factories belching smoke, and wastewater being poured into a river. The teacher showed [student's name] five pictures of living things and five pictures of nonliving things. [Student's name] pointed to the things that could be hurt or become sick because of the pollution. As necessary, the teacher used guiding questions to help [student's name] reach the conclusion that living things can be hurt or made ill by pollution, while nonliving things cannot.
- LS.2B.15: [Student's name] was shown a picture of a pristine landscape followed by a picture of a landfill. [Student's name] described what each scene would look, smell, sound, and feel like, and what the water in the area might taste like. [Student's name] then answered questions about the differences between the two pictures, including the role of humans in creating the landfill.
- LS.2C.15: [Student's name] made an ecology web using yarn and photographs of woodland animals. Then [student's name] listened to a story about the effects of strip mining on wildlife and adjusted the web to account for the introduction of a strip mining operation in the area.
- LS.2D.15: [Student's name] watched a play about how pollution affects the environment and the living things in it. After the show, [student's name] verbally answered five questions about the show (e.g., What happened to the otters when the water got polluted? Why did the person throw the paint can into the water?).
- LS.2E.15: [Student's name] and a small group of peers wrote and put on a play about how human activities can help or harm a forest ecosystem. [Student's name] discussed plot points and dictated several lines of dialogue, the played the role of a box turtle.

Content Standard: LIFE SCIENCE (Diversity and Adaptation Among Living Things)

Standard: *The student will understand that living things have characteristics that enable them to survive in their environment.*

Alternate Learning Expectation (ALE): LS.3A. *Recognize the differences among plants and animals of the same kind, including the features that help them to survive in different environments*

Alternate Performance Indicator (API): LS.3A.1 *Distinguish between plants and animals*

Sample Activities:

- On a field trip to the zoo, [student's name]'s peer partner pointed to various plants and animals along the trail and asked, "Is this a plant or an animal? ... How can you tell?" [Student's name] responded verbally. The peer praised [student's name] for correct answers and, when he/she was incorrect, the peer gave verbal cues to help him/her arrive at the correct answer.
- Given magazines, scissors, and glue, [student's name] cut out pictures of plants and animals and glued them into the correct column of a poster divided into two columns, one labeled "plants" and the other labeled "animals."
- Given 20 index cards (ten with pictures of plants and 10 with pictures of animals) and a folder with two pockets, one labeled "plants" and one labeled "animals," [student's name] put each card in the correct pocket.
- Given a poster with plants and animals on it and asked to identify the animals, [student's name] pointed to the animals rather than to the plants.
- [Student's name] was shown a poster depicting different plants and a poster depicting different animals. In a group discussion led by the teacher, [student's name] and a group of peers talked about what the plants have in common with each other, what the animals have in common with each other, and how the plants and animals are different.
- Given a set of pictures from various magazines, [student's name] verbally responded to questions about distinct differences between plants and animals.

Content Standard: LIFE SCIENCE (Diversity and Adaptation Among Living Things)

Standard: *The student will understand that living things have characteristics that enable them to survive in their environment.*

Alternate Learning Expectation (ALE): LS.3A. *Recognize the differences among plants and animals of the same kind, including the features that help them to survive in different environments*

Alternate Performance Indicator (API): LS.3A.2. *Match an organism that belongs in a specific environment (e.g., fish–water, bird–air)*

Sample Activities:

- [Student's name] helped a group of peers create a multimedia (e.g., sponge painting for bark, yarn for vines, construction paper for leaves) mural of a rain forest with a river running through it. Once the landscape was created, [student's name] helped place birds, fish, insects, reptiles, amphibians, and mammals in appropriate locations on the mural.
- Using paint, markers, and colored pencils, [student's name] created a poster depicting a robin, a rabbit, a deer, a koi fish, a turtle, and a salamander in appropriate habitats.
- Given 20 index cards with pictures of animals from various environments and a folder with four pockets labeled "water," "tree," "desert," and "meadow," [student's name] designated the environment in which the pictured animal belongs by placing each of the cards in the appropriate pocket.
- [Student's name] watched a slide show about animals that live in water.
- [Student's name] made a shoebox diorama (using plastic animals and model railroad terrain) showing animals that live in the forest.
- When given a picture of an organism and a choice between two pictured environments, [student's name] named the organism and pointed to the environment in which that organism is most likely to be found.
- [Student's name] was shown four environments pictured on a poster board. Next, [student's name] was given a picture book with pictures of animals from the four pictured environments. When shown each animal and asked, "Where does this animal live?" [student's name] pointed to the picture of the correct environment.

Content Standard: LIFE SCIENCE (Diversity and Adaptation Among Living Things)

Standard: *The student will understand that living things have characteristics that enable them to survive in their environment.*

Alternate Learning Expectation (ALE): LS.3A. *Recognize the differences among plants and animals of the same kind, including the features that help them to survive in different environments*

Alternate Performance Indicator (API): LS.3A.3. *Identify differences of plants and animals of the same kind*

Sample Activities:

- [Student's name] and the teacher looked through an encyclopedia of dog breeds and talked about the ways in which the various breeds are different (e.g., the dachshund has a long body and short legs; the poodle has a curly coat).
- On a class field trip to a greenhouse, the teacher showed [student's name] a variety of roses and asked how they were different from each other. [Student's name] verbally stated at least two ways in which the roses differed from each other (e.g., size, color, flaws in the petals, climbing rose vs. rose bush).
- [Student's name] drew and colored a representation of the goldfish in the class aquarium, then described his/her picture, including the differences among the various fish (e.g., the bubble-eye, the lion-head, the gold oranda, the black oranda, the one with the white scales).

Content Standard: LIFE SCIENCE (Diversity and Adaptation Among Living Things)

Standard: *The student will understand that living things have characteristics that enable them to survive in their environment.*

Alternate Learning Expectation (ALE): LS.3A. *Recognize the differences among plants and animals of the same kind, including the features that help them to survive in different environments*

Alternate Performance Indicator (API): LS.3A.4 *Identify similarities of plants and animals*

Sample Activities:

- [Student's name] and a peer looked through an encyclopedia of horse breeds and talked about the ways in which the various breeds are the same (e.g., four legs, a mane, a long face, hooves).
- On a class field trip to a greenhouse, the teacher showed [student's name] a variety of flowers and asked how they were different from each other. [Student's name] verbally stated at least two ways in which the flowers were similar to each other (e.g., leaves, petals, roots).
- [Student's name] drew and colored a representation of the tropical fish in the class aquarium, then described his/her picture, including the similarities between the various fish (e.g., fins, gills, tail, basic body shape).
- [Student's name] participated in a class discussion of the ways in which plants and animals are similar to each other (e.g., they are alive; they need water and nourishment; they need air).

Content Standard: LIFE SCIENCE (Diversity and Adaptation Among Living Things)

Standard: *The student will understand that living things have characteristics that enable them to survive in their environment.*

Alternate Learning Expectation (ALE): LS.3A. *Recognize the differences among plants and animals of the same kind, including the features that help them to survive in different environments*

Alternate Performance Indicator (API): LS.3A.5 *Specify the features that enable a plant or animal to survive in its environment*

Sample Activities:

- Given a picture of a polar bear in the arctic, a fennec fox in the desert, and a maned wolf in the grasslands, [student's name] and a small group of peers discussed the features that help each animal survive in its environment (e.g., bear – dense fur, thickly furred webbed feet for swimming, layer of body fat for insulation, exceptionally long and sharp teeth for tearing at walrus and seals; fennec fox – large ears to dissipate heat, pale fur to reflect sun; maned wolf – stilt-like legs for peering over the tall grass).
- Given a description of an environment on an imaginary planet, [student's name] and a small group of peers created five imaginary creatures and two imaginary plants that might be able to live there. The group used markers and colored pencils to make a poster depicting the inhabitants of their planet and explained to the rest of the class the features that would allow their creations to survive in their environment.
- Shown pictures of five different animals in their natural environments, [student's name] described the features that allow each one to survive.

Content Standard: LIFE SCIENCE (Diversity and Adaptation Among Living Things)

Standard: *The student will understand that living things have characteristics that enable them to survive in their environment.*

Alternate Learning Expectation (ALE): LS.3A. *Recognize the differences among plants and animals of the same kind, including the features that help them to survive in different environments*

Alternate Performance Indicator (API): LS.3A.6 *Identify the adaptations that enhance the survival of living things in an environment (e.g., animals shedding/fur thickening)*

Sample Activities:

- [Student's name] watched a video about arctic foxes and how they are adapted for survival in the arctic.
- [Student's name] participated in a class discussion about how animals grow thick coats for winter and shed them in the spring. The teacher gave [student's name] 10 photographs of horses (five with their winter coats and five with their summer coats), and [student's name] sorted them according to which coat each horse had.
- [Student's name] and a small group of peers looked at a photograph of a platypus, identified the adaptations that help the platypus survive, and explained how each helps the platypus survive.
- [Student's name] watched the movie *March of the Penguins* with a class of typically developing peers. After the movie, [student's name] participated in a small group activity listing adaptations that allow the penguin to survive in the Antarctic.
- After a class discussion of animal and plant camouflage, [student's name] (with the help of a peer partner) searched for multi-colored toothpicks in the grass. The peer asked questions to lead [student's name] to the conclusion that the toothpicks that were easiest to find looked very different from the grass, while the ones that were hardest to find were the ones that blended into it. Then they discussed how an animal's camouflage works the same way as the green toothpicks in the grass, making them harder to see and helping them survive.

Content Standard: LIFE SCIENCE (Diversity and Adaptation Among Living Things)

Standard: *The student will understand that living things have characteristics that enable them to survive in their environment.*

Alternate Learning Expectation (ALE): LS.3A. *Recognize the differences among plants and animals of the same kind, including the features that help them to survive in different environments*

Alternate Performance Indicator (API): LS.3A.7 *Recognize the environment in which an organism is typically found*

Sample Activities:

- [Student's name] used markers, photos, and glue to make a poster of a pond and the organisms that are typically found in a pond environment.
- [Student's name] made a model of an African savannah (using model railroad terrain), chose plastic animal replicas to represent animals that would be found in a savannah, and placed the animals appropriately in the scene.
- Given 20 small plastic models of various organisms (e.g., shark, whale, otter, deer, elephant, chimpanzee) and a plastic mat divided into five environments—river, ocean, woodland, jungle, and grassland—[student's name] placed each organism in its appropriate environment.

Content Standard: LIFE SCIENCE (Diversity and Adaptation Among Living Things)

Standard: *The student will understand that living things have characteristics that enable them to survive in their environment.*

Alternate Learning Expectation (ALE): LS.3A. *Recognize the differences among plants and animals of the same kind, including the features that help them to survive in different environments*

Alternate Performance Indicator (API): LS.3A.8 *Classify plants and animals according to their features*

Sample Activities:

- Given a whiteboard and an erasable marker, [student's name] made a list of animals that have webbed feet.
- Given construction paper, a hole puncher, notebook paper, markers, yarn, and photos of flowering plants, [student's name] made a book of plants that have flowers and labeled each flower with help from a peer.
- While the class was setting up a classroom nursery, [student's name] helped group the plants by type: roses, ferns, cacti, violets.
- [Student's name] sorted 100 animal pictures into the following categories: animals with wings, animals with scales, animals with fur, animals with slimy skin, and animals with shells.

Content Standard: LIFE SCIENCE (Food Production and Energy for Life)

Standard: *The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.*

Alternate Learning Expectation (ALE): LS.4A. *Recognize the basic requirements of all living things*
LS.4B. *Recognize the basic parts of plants*

Alternate Performance Indicator (API): LS.4A-B.1 *Express basic wants and needs*

Sample Activities:

- LS.4A.1: Given a communication board and asked to make a choice between juice and milk, [student's name] pointed to a picture of the desired drink. **Note: It is the symbol on the communication board that allowed this to be acceptable. Simply asking for or pointing to milk or juice is not acceptable.**
- LS.4A.1: While in the lunch line, [student's name] used picture exchange cards to order items for his/her lunch tray. **Note: It is the picture exchange card that made this acceptable. Simply asking for or pointing to food items is not acceptable.**
- LS.4B.1: Given a set of pictures depicting the plant-based ingredients for a salad—lettuce, tomato, carrots, cucumbers, onion, olives, and chick peas—plus three additional, unrelated pictures, [student's name] pointed to appropriate items for a tossed salad. [Student's name] then matched the pictures to the actual ingredients and helped make a salad from the chosen ingredients.
- LS.4B.1: Given a set of pictures depicting the plant-based ingredients for a fruit salad—apple, cherries, mandarin oranges, banana, grapes, and walnuts—plus three additional, unrelated pictures, [student's name] pointed to appropriate items for a fruit salad. [Student's name] then matched the pictures to the actual ingredients and helped make the fruit salad from the chosen ingredients.

Content Standard: LIFE SCIENCE (Food Production and Energy for Life)

Standard: *The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.*

Alternate Learning Expectation (ALE): LS.4A. *Recognize the basic requirements of all living things*
LS.4B. *Recognize the basic parts of plants*

Alternate Performance Indicator (API): LS.4A-B.2 *Recognize the basic needs of living things (e.g., food, water, air, sunlight)*

Sample Activities:

- LS.4A.2: [Student's name] helped give food and water to the class gerbils.
- LS.4A.2: Given a worksheet with 10 pictured items, four of which are necessary for survival and the rest of which are not, [student's name] circled the ones that are necessary for survival.
- LS.4A.2: [student's name] was shown a pet guinea pig and allowed to pet it and hold it. Then [student's name] participated in a class discussion about the basic survival needs of the guinea pig (e.g., food, water, air, sunlight, a clean cage) and whether they are the same as ours.
- LS.4A.2: [Student's name] participated in a small-group project in which each student made a terrarium from a liter cola bottle, potting soil, pebbles, and seeds.
- LS.4A.2: [Student's name] planted marigold seeds in a pot using potting soil, placed the pot in the window, and watered the plant.
- LS.4B.2: [Student's name] took part in an experiment to show how plants get water and nutrients from their environment. A piece of celery was placed in a cup of water and food coloring. [Student's name] watched the food coloring move up the stalk and into the leaves, and then took part in a discussion of what happened and how it happened.
- LS.4B.2: [Student's name] looked at and touched a broadleaf plant. The teacher showed each part (e.g., root, stem, leaf) and explained how each part helps the plant attain nutrition, water, sunlight, and air. [Student's name] then correctly identified each part by pointing when asked to "show me the roots" or "show me the part that takes in sunlight."

Content Standard: LIFE SCIENCE (Food Production and Energy for Life)

Standard: *The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.*

Alternate Learning Expectation (ALE): LS.4A. *Recognize the basic requirements of all living things*
LS.4B. *Recognize the basic parts of plants*

Alternate Performance Indicator (API): LS.4A-B.3 *Recognize that plants use sunlight, water and air to live*

Sample Activities:

- LS.4A.3: [Student's name] shared the results of the following experiment, including a discussion of the fact that plants need water and sunlight. Several weeks previously, [student's name] helped plant three ferns, each in a separate Styrofoam cup. One was watered regularly and placed in the window where it received sunlight. Another plant was placed in the window to receive sunlight, but was not watered. Another was watered, but placed in a dark cabinet where it received no sunlight. Each day, [student's name] recorded the results (drew a picture with colored pencils and wrote a simple description of what each plant looked like and how well it was doing). For today's activity, [student's name] made a display of the plants, drawings, and descriptions, and explained them to the class.
- LS.4A.3: [Student's name] participated in a class discussion about the needs of plants, and then helped plant a classroom garden in which those needs would be met.
- LS.4B.3: [Student's name] completed a worksheet by drawing a line from each plant part (leaf, stem, root) to the basic need it supplies.

Content Standard: LIFE SCIENCE (Food Production and Energy for Life)

Standard: *The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.*

Alternate Learning Expectation (ALE): LS.4A. *Recognize the basic requirements of all living things*
LS.4B. *Recognize the basic parts of plants*

Alternate Performance Indicator (API): LS.4A-B.4 *Recognize that animals obtain their food by eating plants or other animals*

Sample Activities:

- LS.4A.4: [Student's name] watched a video about wolves. Afterward, [student's name] participated in a group discussion about what wolves eat and how they get their food.
- LS.4A.4: [Student's name] used markers and colored pencils to make a poster depicting seven different animals—wolf, hawk, bear, raccoon, deer, rabbit, and mouse—and what they eat.
- LS.4B.4: [Student's name] looked at pictures of plants from which we get vegetables and fruits (e.g., tomatoes on a vine, apples on a tree, a carrot with the roots and leaves attached). When prompted, [student's name] pointed to the part (or parts of the plant) we eat.

Content Standard: LIFE SCIENCE (Food Production and Energy for Life)

Standard: *The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.*

Alternate Learning Expectation (ALE): LS.4A. *Recognize the basic requirements of all living things*
LS.4B. *Recognize the basic parts of plants*

Alternate Performance Indicator (API): LS.4A-B.5 *Identify the functions of the basic parts of plants*

Sample Activities:

- LS.4A.5: [Student's name] participated in a small-group project making a model of a plant using papier-mâché over chicken wire for the stalk, yarn or pipe stems for roots, and construction paper leaves. Then [student's name] helped label each part, both by name and by its function in meeting the plant's basic requirements.
- LS.4B.5 [Student's name] completed a worksheet on plant parts by gluing foam parts—flower, leaf, stem, root, and seed—onto the worksheet. (Prerequisite)
- LS.4B.5: [student's name] was given pictures of four different plant parts—leaf, stem, root, and flower. When the teacher named a function, [student's name] pointed to the part of the plant that performs that function.
- LS.4B.5: [Student's name] was given pictures of four different plant parts—leaf, stem, root, and flower. When the teacher pointed to a picture, [student's name] verbally named the plant part and described the function it performs.

Content Standard: LIFE SCIENCE (Food Production and Energy for Life)

Standard: *The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.*

Alternate Learning Expectation (ALE): LS.4A. *Recognize the basic requirements of all living things*
LS.4B. *Recognize the basic parts of plants*

Alternate Performance Indicator (API): LS.4A-B.6 *Identify how various animals obtain and use food for energy*

Sample Activities:

- LS.4A.6: [Student's name] drew 10 small plastic animals from a "surprise box," (one at a time), verbally named each animal, and described how it obtains food.
- LS.4A.6: [Student's name] drew 10 animal cards from a "surprise box," (one at a time), verbally named each animal, and described how it obtains food.
- LS.4A.6: [Student's name] used markers, magazine photos, and glue to make a poster depicting animals that find their food by grazing (e.g., horses, cattle, goats).
- LS.4B.6: Given art paper, construction paper, markers, and yarn (for binding), [student's name] made a twelve-page book about animals that eat plants (e.g., horses, cattle, donkeys, sheep). The book showed which parts of each plant each animal eats.

Content Standard: LIFE SCIENCE (Food Production and Energy for Life)

Standard: *The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.*

Alternate Learning Expectation (ALE): LS.4A. *Recognize the basic requirements of all living things*
LS.4B. *Recognize the basic parts of plants*

Alternate Performance Indicator (API): LS.4A-B.7 *Recognize that plants make their own food (i.e., photosynthesis)*

Sample Activities:

- LS.4A.7: [Student's name] took part in a group discussion about food (e.g., who needs it, why we need it, where we get it, how we use it) and how all living things, including plants, need food. They watched a video about photosynthesis and drew a picture on art paper of how photosynthesis works.
- LS.4A.7: To see if plants need soil for photosynthesis, [student's name] tried growing a sweet potato in water. To set up the experiment, [student's name] put the bottom third of sweet potato in a glass of water. To keep the rest of the sweet potato out of the water, [student's name] inserted toothpicks into the sweet potato so the toothpicks rested on the rim of the glass and kept the sweet potato from falling into the water. [Student's name] then placed the potato in the window and waited to see if, over the next few days, the potato grew roots.
- LS.4B.7: Given a magnifying glass and a variety of leaves, [student's name] observed the stomata on the underside of each leaf. He/she drew a picture on art paper depicting both sides of the leaf and discussed how the leaf helps the plant make its own food.

Content Standard: LIFE SCIENCE (Food Production and Energy for Life)

Standard: *The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.*

Alternate Learning Expectation (ALE): LS.4A. *Recognize the basic requirements of all living things*
LS.4B. *Recognize the basic parts of plants*

Alternate Performance Indicator (API): LS.4A-B.8 *Recognize that plants give us oxygen*

Sample Activities:

- LS.4A.8: [Student's name] and a small group of peers practiced holding their breath and timing each other to see who could hold his/her breath the longest. Afterward, [student's name] participated in a group discussion about why we need to breathe and where we get oxygen (from plants).
- LS.4B.8: On a piece of unlined paper, [student's name] drew a diagram of a plant, labeled each part, and noted the function of each part, including its role in the creation of oxygen.

Content Standard: LIFE SCIENCE (Food Production and Energy for Life)

Standard: *The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.*

Alternate Learning Expectation (ALE): LS.4A. *Recognize the basic requirements of all living things*
LS.4B. *Recognize the basic parts of plants*

Alternate Performance Indicator (API): LS.4A-B.9 *Recognize that plants clean the air (i.e., take in carbon dioxide) and return oxygen to the air*

Sample Activities:

- LS.4A.9: [Student's name] used markers on poster board to make a poster depicting the oxygen/carbon dioxide cycle.
- LS.4B.9: On bristol board, [student's name] drew a diagram of a plant, labeled each part, and noted the function of each part, including its role in the creation of oxygen and the elimination of carbon dioxide.

Content Standard: LIFE SCIENCE (Heredity and Reproduction)

Standard: *The student will understand the basic principles of inheritance.*

Alternate Learning Expectation (ALE): LS.5A. *Recognize that living things reproduce*
LS.5B. *Recognize that offspring tend to resemble their parents*

Alternate Performance Indicator (API): LS.5A-B.1 *Respond to a familiar adult (e.g., teacher, parent, sibling)*

Sample Activities:

- LS.5A-B.1: The teacher called [student's name]'s name and used verbal and tactile cues to encourage him/her to turn his head toward the teacher. After three tries, [student's name] turned his/her head toward the teacher when his/her name was called.
- LS.5A-B.1: While going through the cafeteria line, [student's name] was greeted by a familiar cafeteria worker. [Student's name] responded by smiling and making eye contact.
- LS.5A-B.1: [Student's name] entered the classroom and was greeted by the teacher, who encouraged [student's name] to respond with a verbal greeting (e.g., "Hi") using a normal tone of voice and a polite demeanor.

Content Standard: LIFE SCIENCE (Heredity and Reproduction)

Standard: *The student will understand the basic principles of inheritance.*

Alternate Learning Expectation (ALE): LS.5A. *Recognize that living things reproduce*
LS.5B. *Recognize that offspring tend to resemble their parents*

Alternate Performance Indicator (API): LS.5A-B.2 *Match offspring with their parents (e.g., adult dog with puppy)*

Sample Activities:

- LS.5A.2: [Student's name] was shown a picture of a pregnant woman, a pregnant cat, and a bird with a nest full of eggs. Then [student's name] participated in a group discussion about the fact that living things reproduce.
- LS.5A.2: [Student's name] examined the following plants and their seeds: corn, marigold, dandelion, maple, watermelon, and daffodil. Then he/she participated in a discussion of how plants reproduce.
- LS.5B.2: Given a set of 10 two-piece animal puzzles (parent on one half, baby on the other), [student's name] correctly matched each parent to its offspring.
- LS.5B.2: [Student's name] assembled a 12-piece puzzle that matches animals to their offspring.
- LS.5B.2: Given a worksheet with adult-stage animals on the left and their offspring on the right, [student's name] completed the worksheet by drawing a line from each animal to its offspring.
- LS.5B.2: On a field trip to a horse farm, [student's name] and a peer observed the mares and foals together and discussed the ways in which the foal is similar to its parents.
- LS.5B.2: Given two sets of picture cards (parent animals in one set, baby animals in the other), [student's name] matched the baby animals to the parent. Pictured animals were: horse/foal, cow/calf, seal/seal pup, frog/tadpole, sheep/lamb, snake/hatchlings, butterfly/caterpillar, cat/kitten, dog/puppy, duck/duckling.
- LS.5B.2: [Student's name] played a "Concentration"-type memory matching game in which adult animals are matched to their offspring (e.g., an adult pig to a piglet, a dog to a puppy).

Content Standard: LIFE SCIENCE (Heredity and Reproduction)

Standard: *The student will understand the basic principles of inheritance.*

Alternate Learning Expectation (ALE): LS.5A. *Recognize that living things reproduce*
LS.5B. *Recognize that offspring tend to resemble their parents*

Alternate Performance Indicator (API): LS.5A-B.3 *Recognize that all living things come from other living things*

Sample Activities:

- LS.5A.3: After watching a video about baby animals, [student's name] participated in a group discussion about how all animals come from parents of the same species.
- LS.5A.3: On a field trip to a farm, [student's name] petted a mother collie, petted and held her six-week-old puppies, and took part in a discussion about how all animals come from parents of the same species.
- LS.5A.3: [Student's name] and a small group of peers examined a lima bean that had been soaked overnight. [Student's name] looked at the seed through a magnifying glass, tried to peel off the outer seed covering, split the seed in half, drew the bean/seed, and labeled the different parts of the seed.
- LS.5B.3: After hatching baby chicks in an incubator, [student's name] looked at pictures of an adult hen and a rooster, He/she and the teacher discussed the ways in which the babies resembled the parents.

Content Standard: LIFE SCIENCE (Heredity and Reproduction)

Standard: *The student will understand the basic principles of inheritance.*

Alternate Learning Expectation (ALE): LS.5A. *Recognize that living things reproduce*
LS.5B. *Recognize that offspring tend to resemble their parents*

Alternate Performance Indicator (API): LS.5A-B.4 *Distinguish between an adult and a child*

Sample Activities:

- Given a set of 20 pictures (10 pictures of adults and 10 pictures of children of various ages), [student's name] placed the pictures of adults in one pile and the pictures of children in a separate pile.
- On the playground, [student's name] answered correctly when the teacher pointed to a person and asked, "Is that an adult or a child?" The teacher asked about five adults and five children, giving verbal prompts when [student's name] answered incorrectly.

Content Standard: LIFE SCIENCE (Heredity and Reproduction)

Standard: *the student will understand the basic principles of inheritance.*

Alternate Learning Expectation (ALE): LS.5A. *Recognize that living things reproduce*
LS.5B. *Recognize that offspring tend to resemble their parents*

Alternate Performance Indicator (API): LS.5A-B.5 *Recognize all living things come from other living things and change as they mature*

Sample Activities:

- LS.5A.5: [Student's name] watched the National Geographic video *Life Before Birth (In the Womb)* and discussed the way babies change from conception to birth.
- LS.5B.5: Using paper, markers, photographs, or pictures cut from magazines, [student's name] made a book about how a kitten changes as it grows from a newborn kitten to a cat.
- LS.5B.5: After a discussion about how living things grow and change, [student's name] was given a set of pictures showing the growth of person from infancy to old age. [Student's name] placed the pictures in sequential order: infant, toddler, teen, young man, old man.

Content Standard: LIFE SCIENCE (Heredity and Reproduction)

Standard: *The student will understand the basic principles of inheritance.*

Alternate Learning Expectation (ALE): LS.5A. *Recognize that living things reproduce*
LS.5B. *Recognize that offspring tend to resemble their parents*

Alternate Performance Indicator (API): LS.5A-B.6 *Two-step sequence development of a specific organism (e.g., butterfly, frog, chick)*

Sample Activities:

- LS.5A.6: [Student's name] was shown posters of various animals (e.g., duck, moth, frog, cat) in the science hall and given flash cards of these same animals at an earlier stage of development (e.g., egg, cocoon, tadpole, kitten). When shown a specific poster and asked to find the card that matched, [student's name] found the correct card and showed it to the teacher.
- LS.5A.6: After watching a video about the life cycle of a butterfly, [student's name] drew a picture on art paper showing the transformation of the caterpillar to the butterfly.
- LS.5A.6: After watching a video about the metamorphosis of a tadpole to a frog, [student's name] helped set up a classroom tadpole tank. After the frog eggs were placed in the tank, [student's name] predicted what would happen to the eggs by drawing a sequence of pictures showing the transformation from egg to tadpole to frog.
- LS.5B.6: [Student's name] watched baby chicks hatch from eggs in a classroom incubator.

Content Standard: LIFE SCIENCE (Heredity and Reproduction)

Standard: *The student will understand the basic principles of inheritance.*

Alternate Learning Expectation (ALE): LS.5A. *Recognize that living things reproduce*
LS.5B. *Recognize that offspring tend to resemble their parents*

Alternate Performance Indicator (API): LS.5A-B.7 *Recognize a method of pollination (e.g., bee, wind)*

Sample Activities:

- LS.5A.7: [Student's name] put a pair of old socks over his/her shoes and went on a hike in the park with the rest of the class. When they returned, [student's name] examined his/her socks to see what kinds of seeds were stuck to the socks. The class discussed how seeds "catch a ride" with other animals the way they "caught a ride" on [student's name]'s socks.
- LS.5A.7: [Student's name] made a model "helicopter seed" by folding a piece of paper in half, cutting halfway down the fold line, re-folding, bending the cut sides down to form "wings," and putting a paper clip on the bottom edge. [Student's name] dropped the "seed" to see how it fell, then dropped it next to a fan to show how the wind helps the seed go farther.
- LS.5A.7: After reading a story about how butterflies pollinate flowers, [student's name] was given a variety of art supplies (e.g., papers, pipe cleaners, markers) from which to make a butterfly. When each student in the class had made a butterfly, the butterflies were attached to a mobile and hung in the classroom.
- LS.5B.7: On a day when the dandelions had gone from yellow flowers to gray seeds, [student's name] and the rest of the class went to the playground, picked dandelions, and watched what happened when they blew the seeds from the stems. Afterward, [student's name] participated in a class discussion about how the wind, like our breath, can blow the seeds away so they can grow into other dandelions.
- LS.5B.7: Given a collection of seeds, [student's name] and a small group of peers discussed the differences among the seeds, then grouped the seeds according to how they are dispersed (e.g., animal, wind, water). [Student's name] and his/her group checked their work by comparing the seeds to a teacher-made booklet of seeds and the plants they grow into.

Content Standard: LIFE SCIENCE (Heredity and Reproduction)

Standard: *The student will understand the basic principles of inheritance.*

Alternate Learning Expectation (ALE): LS.5A. *Recognize that living things reproduce*
LS.5B. *Recognize that offspring tend to resemble their parents*

Alternate Performance Indicator (API): LS.5A-B.8 *Identify the seeds of a plant within the ovary or in a piece of fruit*

Sample Activities:

- LS.5A.8: After listening to the story of Johnny Appleseed, [student's name] was given an apple divided into halves. When asked, "Where are the seeds?" [student's name] identified the seeds by pointing.
- LS.5B.8: Given a variety of fruits and vegetables—orange, apple, watermelon, avocado, summer squash, pomegranate, and snow pea—cut into halves, [student's name] removed seeds from each and discussed the differences between them.

Content Standard: LIFE SCIENCE (Heredity and Reproduction)

Standard: *The student will understand the basic principles of inheritance.*

Alternate Learning Expectation (ALE): LS.5C. *Recognize that the appearance of plants and animals changes as they mature*

Alternate Performance Indicator (API): LS.5C.1 *Recognize an illustration that depicts the change that occurs as a result of complete metamorphosis (e.g., butterfly, tadpole development)*

Sample Activities:

- Given a picture of the life cycle of a butterfly and asked what it represented, [student's name] correctly verbally identified it.
- [Student's name] read a picture book about the life cycle of a frog, and then verbally explained an illustration of the tadpole's metamorphosis into a frog.
- Given a poster showing the life cycle of a butterfly, [student's name] used a laser pointer to point to each stage of development as the teacher described it.
- Given glue, a piece of Bristol board, and a scrambled set of pictures showing the stages of a butterfly's life cycle, [student's name] unscrambled and glued the pictures t the board in the correct order to illustrate the metamorphosis of a butterfly.

Content Standard: LIFE SCIENCE (Biological Change)

Standard: *The student will understand that living things have changed over time.*

Alternate Learning Expectation (ALE): LS.6A. *Recognize that some plants and animals that once lived are no longer found on earth*

Alternate Performance Indicator (API): LS.6A.1 *Identify animals that are extinct (e.g., dinosaurs)*

Sample Activities:

- [Student's name] and the rest of the class were read an article about dinosaurs. To demonstrate the size of some dinosaurs, the class was shown a life-sized paper outline of a T-Rex footprint. [Student's name] and peers tried to guess how many children's footprints would fit inside the T-Rex footprint. Each child stepped into the footprint, and the teacher traced his/her feet. This process continued until the T-Rex footprint was completely filled with student footprints. Then students then counted students footprints and compared the actual number with their guesses.
- [Student's name] made a diorama of a prehistoric landscape, complete with plastic dinosaurs. Terrain was made from construction paper.
- After a class discussion about paleontologists and how they dig up fossils, [student's name] helped make plaster castings of "dinosaur footprints" (previously made by the teacher in a tub of wet, packed sand). After the plaster dried, the plaster footprints were buried in sand for [student's name] to carefully dig up using plastic excavation tools and a brush (to brush away the sand).
- After watching the video *Walking with Dinosaurs*, [student's name] participated in a class discussion about dinosaurs.

Content Standard: LIFE SCIENCE (Biological Change)

Standard: *The student will understand that living things have changed over time.*

Alternate Learning Expectation (ALE): LS.6A. *Recognize that some plants and animals that once lived are no longer found on earth*

Alternate Performance Indicator (API): LS.6A.2 *Identify plants and animals that are endangered*

Sample Activities:

- [Student's name] used paper, markers, scissors, glue, magazine photos, and yarn for binding to make a book of endangered animals.
- [Student's name] participated in a group discussion about the book *Wildlife Special Agent*, about the division of Law Enforcement of the U.S. Fish and Wildlife Service. The book described how agents help protect endangered species from poachers and other dangers. It also described cases involving specific endangered animals. After the discussion, [student's name] collaborated with the group to write a story about a fictional wildlife special agent protecting the endangered animal of their choice.
- Given a worksheet with 20 pictured animals, 10 of which are endangered and 10 of which are not, [student's name] completed the worksheet by circling the endangered animals.
- [Student's name] read a simple book about endangered plants aloud to the teacher.
- [Student's name] listened to a presentation about endangered plants and animals given by a wildlife management specialist.

Content Standard: LIFE SCIENCE (Biological Change)

Standard: *The student will understand that living things have changed over time.*

Alternate Learning Expectation (ALE): LS.6A. *Recognize that some plants and animals that once lived are no longer found on earth*

Alternate Performance Indicator (API): LS.6A.3 *Understand how environmental change will affect living organisms*

Sample Activities:

- Given five pictures depicting various climates, [student's name] dressed flannel board figures in appropriate clothing for each type of weather. Then [student's name] participated in a discussion about how people who live in different climates and environments adapt in response to those differences (e.g., warmer clothes, fewer clothes, live in an igloo instead of a house).
- [Student's name] watched a video about how environmental changes may have contributed to the extinction of the dinosaurs.
- Given pictures of 10 animals—polar bear, tiger, hippopotamus, penguin, squirrel, butterfly, duck, whale, frog, and chimpanzee—[student's name] predicted how each animal would be affected if its environment became hotter or colder, more developed by humans, or more polluted.